

What is claimed is:

1. An operation state analyzer for analyzing an operation state of a robot, comprising:

image capturing means for acquiring image information representing images of the robot in operation;

internal information acquiring means for acquiring internal information of the robot including information on a state of input/output signals and a state of motion of the robot;

setting means for setting a starting condition for starting and a terminating condition for terminating the acquiring of the information; and

recording means for recording the image information acquired by said image capturing means and the internal information acquired by said internal information acquiring means at every predetermined period to be associated with the time at which the information is acquired from when the starting condition is fulfilled until when the terminating condition is fulfilled.

2. An operation state analyzer according to claim 1, further comprising display means for displaying the images of the robot based on the recorded image information in time series on a display device; input means for allowing an input to select one of the displayed images of the robot, wherein said display means displays the recorded internal information associated with the selected one of the displayed images on the display device.

3. An operation state analyzer according to claim 2, further comprising calculation means for calculating one or more items of velocities, accelerations and torques of respective axes of the robot, and a velocity, an acceleration and a torque of a tool center point of the robot based on the recorded internal information and the recorded time at which the information is acquired for

image of the robot,

wherein said display means displays the calculated items together with the recorded internal information associated with the selected one of the images of the robot on the display device.

4. An operation state analyzer according to claim 3, wherein said display means displays an indication to the image of the robot in a state where at least one of the items exceeds a predetermined allowable value.

5. An operation state analyzer according to claim 3, wherein said display means displays the calculated items in time series as a graph.

6. An operation state analyzer according to any one of claims 1 to 4, further comprising means for displaying the state of the input/output signals based on the recorded internal information in time series as a graph.

7. An operation state analyzer according to claim 6, said setting means sets the starting condition by designating a particular operation state of the robot, and sets the terminating condition by designating one of a particular operation state of the robot, elapsing time from a start of the acquiring of the information and the number of acquisitions of the information.

8. An operation state analyzer according to any one of claims 1 to 5, said setting means sets the starting condition by designating a particular operation state of the robot, and sets the terminating condition by designating one of a particular operation state of the robot, elapsing time from a start of the acquiring of the information and the number of acquisitions of the information.